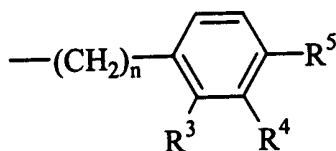


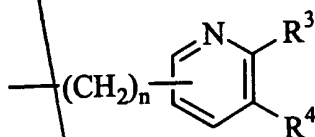
4 wherein R² is an alkyl group, heteroalkyl group, aryl group or heteroaryl group.

1 14. (Amended) The diffusion barrier according to claim 13, wherein R² includes
2 an alkyl and an aryl group and has the following structure:



3 wherein R³, R⁴ and R⁵ are independently selected from the group consisting of hydrogen, alkyl
4 groups, heteroalkyl groups, halo groups, NH₂, NHR⁶, NR⁶R⁷, OH, OR⁶, SH, SR⁶, CHO, COOH
5 and CN, and wherein R⁶ and R⁷ are alkyl groups, and wherein n is an integer ranging from 1 to 5.

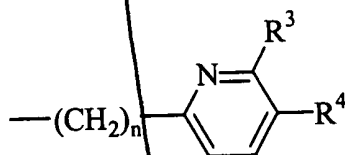
Al
end
1 15. (Amended) The diffusion barrier according to claim 13, wherein R² has the
2 following structure:



3 wherein R³ and R⁴ are independently selected from the group consisting of hydrogen, alkyl
4 groups, heteroalkyl groups, halo groups, NH₂, NHR⁶, NR⁶R⁷, OH, OR⁶, SH, SR⁶, CHO, COOH
5 and CN, and wherein R⁶ and R⁷ are alkyl groups, and wherein n is an integer ranging from 1 to 5.

1 16. (Amended) The diffusion barrier according to claim 14, wherein R³, R⁴ and R⁵
2 are hydrogen and n is 2.

1 17. (Amended) The diffusion barrier according to claim 15, wherein R² has the
2 following structure:



3 and wherein R³ and R⁴ are hydrogen and n is 2.

$$\begin{array}{c} \text{---O---} \\ | \\ \text{---O---Si---R}^2 \\ | \\ \text{---O---} \end{array}$$
$$-(\text{CH}_2)_n-\text{C}_6\text{H}_2(\text{R}^3)(\text{R}^4)(\text{R}^5)-$$
$$\text{---}(\text{CH}_2)_n\text{---}\text{C}_6\text{H}_3(\text{R}^3)(\text{R}^4)$$

1 22. (Amended) The integrated circuit according to claim 20, wherein R³, R⁴ and
2 R⁵ are hydrogen and n is 2.